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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/561,363	05/18/2006	Laurits Lydehoj Hansen	0088562-002US0	9652

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DAVIS WRIGHT TREMAINE LLP - San Francisco
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EXAMINER

AHMED, HASAN SYED

ART UNIT	PAPER NUMBER
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1615

NOTIFICATION DATE	DELIVERY MODE
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11/12/2010

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/561,363	Applicant(s) HANSEN ET AL.	
	Examiner HASAN S. AHMED	Art Unit 1615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 August 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,6,15,21,24,38,43,44 and 52-64 is/are pending in the application.
- 4a) Of the above claim(s) 59-64 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,6,15,21,24,38,43,44 and 52-58 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>8/31/06,6/26/08,6/16/09</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Receipt is acknowledged of applicants': (a) IDS, filed on 31 August 2006; (b) supplemental IDS, filed on 26 June 2008; (c) second supplemental IDS, filed on 16 June 2009; (d) amendment and response to restriction requirement, filed on 3 May 2010; and (e) amendment and response to restriction requirement, filed on 23 August 2010.

* * * * *

Election/Restrictions

The restriction requirement mailed on 1 April 2010 is hereby withdrawn in view of the subsequent amendment to the claims and remarks.

Applicants' election without traverse of the species "sesquiterpene lactone" in the reply filed on 23 August 2010 is acknowledged.

Claims 59-64 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 23 August 2010.

* * * * *

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

* * * * *

Claim Objections

Claims 1, 6, and 43 are objected to because of the following informalities:

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Claim 1: (a) malodor is misspelled as "malodou", (b) a colon should follow "comprising";

Claim 6: the "a" between "comprises" and "at" should be deleted;

Claim 43: a colon should follow "comprising".

Appropriate correction is required.

* * * * *

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 3 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically, the time period being claimed, i.e., "substantially until slaughter" is not defined in the claim or the specification; as such, it is unclear exactly how long before slaughter the product being claimed is to be fed to the animal. Clarification is required.

* * * * *

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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Claims 1-3, 6, 15, 21, 24, 38, 43, 44, and 52-57 rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 4,865,852 ("Tamatani"), further in view of Proceedings of the New Zealand Society of Animal Production 63: 269-273 ("Hoskin"), further in view of Veterinary Parasitology 112 (2003) 147-155 ("Marley"), further in view of Journal of the Science of Food and Agriculture 81:467-484 ("Bais"), further in view of Food Chemistry 76 (2002) 139-147 ("Poli"), further in view of Skatole and Boar Taint (1998), Chapter 3 ("Borg"). (All cited references are currently of-record.)

Tamatani teaches an additive for stock feeds containing decomposition products of chicory roots, comprising the total content of polysaccharides and inulooligosaccharides of tri- and higher saccharides being 40% by weight and total solids content being 80% by weight (reading on the chicory product of claims 1, 43, and 44) (see abstract). Since the additive is for stock feeds, a person of ordinary skill in the art would understand that the animals will be eating the disclosed feed *ad libidum*, thus reading on the one day prior to slaughter of claim 1 and the two days and substantially until slaughter of claims 2 and 3. Since the animals will eat the feed *ad libidum*, and since the total content of polysaccharides and inulooligosaccharides of tri- and higher saccharides being 40% by weight and total solids content being 80% by weight (see abstract), or the oligosaccharides being 30-60% by weight (see col. 7, lines 16-17), the animals will get the at least 2.5% daily energy basis from the disclosed stock feed, as recited in claim 6. The chicory is processed by chopping, then heating and drying chicory roots in order to form chicory flakes, then grinding the chicory flakes (reading on the method of claims 43, 44, and 52) (see abstract). The heated and dried chicory

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flakes contain about 50.4% inulin, 0.9% fructose, 0.1% glucose, and 3.6% sucrose (reading on the inulin and low molecular sugar of claim 44) (see col. 4, lines 55-64).

Regarding claim 53, Tamatani teaches a heating temperature as low as 120 degrees C (see col. 4, line 32). A prima facie case of obviousness exists where the claimed ranges and prior art ranges do not overlap but are close enough that one skilled in the art would have expected them to have the same properties. *Titanium Metals Corp. of America v. Banner*, 778 F.2d 775, 227 USPQ 773 (Fed. Cir. 1985). See MPEP 2144.05. Regarding claim 54, the product heated at this temperature for 8-24 hours (see col. 4, line 33) will inherently contain less than 10% water.

Tamatani explains that the disclosed method is beneficial in that it is effective to inhibit diarrhea in livestock (see col. 3, lines 30-31).

Regarding the secondary metabolite of claim 44, the terpenes of claim 56, and the sesquiterpene lactones of claim 57, these are inherently present in the chicory plant, as shown by Bais (see page 472 - including, *inter alia*, the lactucin and lactucopicrin of claim 58). Bais further explains that inulin is inherently present in chicory plant (see page 473, right column).

Regarding the low molecular sugar and secondary metabolite of claims 44 and 55, the sesquiterpene lactone of claim 57 and the 8-deoxylactucin of claim 58, Poli explains that these ingredients are inherently present in the chicory root (see page 142, section 3.2.1.).

Regarding the reduction of parasitic infections recited in claims 1 and 38, Hoskin and Marley explain that an animal diet comprising chicory has an antiparasitic effect upon the animal (see the abstracts of both references).

Regarding the reduction of skatole recited in claim 1, Borg explains that an animal diet comprising fructo-oligosaccharides (i.e. inulin) results in significantly lower levels of skatole in plasma (see Figure 13 and page 67, first full-paragraph). Borg further explains that there is an excellent correlation between concentration of skatole in blood plasma and concentration of skatole in back fat (see page 65, first full-paragraph).

Regarding claim 21 and 24, applicants' composition as claimed, contains the same components in the same configuration as the prior art. Properties are the same when the structure and composition are the same. *In re Best*, 195 USPQ 433.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to disclose a processed chicory product comprising at least one low molecular weight sugar and at least one secondary metabolite, as taught by Tamatani in view of Hoskin, further in view of Marley, further in view of Bais, further in view of Poli, further in view of Borg. One of ordinary skill in the art at the time the invention was made would have been motivated to make such a composition because it has anti-diarrheal effects, as explained by Tamatani, anti-parasitic effects, as explained by Hoskin and Marley, and reduces plasma and tissue skatole levels, as explained by Borg.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HASAN S. AHMED whose telephone number is (571)272-4792. The examiner can normally be reached on 9am - 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert A. Wax can be reached on (571)272-0623. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/H. S. A./
Examiner, Art Unit 1615

/Humera N. Sheikh/
Primary Examiner, Art Unit 1615